Portland Veterans Affairs Medical Center

Hypothyroidism

What is hypothyroidism?

Hypothyroidism is a condition in which the thyroid gland does not produce enough thyroid hormone. Too little hormone slows down all the chemical reactions in the body, causing mental as well as physical changes.

Hypothyroidism can occur in anyone. Middle-aged and elderly women are most commonly affected. There is a strong tendency for all kinds of thyroid disorders to run in families.

How does it occur?



The thyroid gland is a small gland that wraps around the windpipe below the Adam's apple. The thyroid takes iodine from the food you eat to make hormones called thyroxine (T4) and triiodothyronine (T3).

These hormones regulate the rate at which you burn calories for energy. Too little hormone, as in hypothyroidism, may cause you to gain weight. Also, if you don't have enough hormone, your heartbeat slows down and your body temperature decreases. In addition, food moves through your intestines more slowly and your muscles contract more slowly.



Causes of hypothyroidism include:

Hashimoto's disease (thyroiditis): This condition is an inflammation of the thyroid gland. It is a disorder of your immune system. The immune system normally protects you from infection.



Radiation treatment for hyperthyroidism (an overactive thyroid gland): Radioactive iodine is commonly used to treat an overactive thyroid gland. Radioactivity often destroys the gland, so that the body needs replacement thyroid hormone.

People who have received x-ray treatment for cancers of the head and neck may develop hypothyroidism, if their thyroid was exposed to radiation.

Viruses and bacteria: They can infect the thyroid gland and cause it to produce too little hormone. These infections can be treated and do not usually cause permanent hypothyroidism.





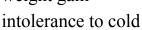
Problem with the pituitary gland (rare): The pituitary gland stimulates the thyroid to produce hormones. The pituitary may fail to stimulate the thyroid to make enough hormones to meet your body's needs.

Congenital hypothyroidism (rare): Some people are born without thyroid glands or with glands that cannot make thyroid hormone.

What are the symptoms?

The gradual slowing of all your body's processes caused by hypothyroidism can take months or even years, making it difficult for you to recognize the disease. Symptoms of hypothyroidism include:

fatigue depression muscle weakness constipation weight gain



heavy and prolonged menstrual periods coarse, dry hair

premature graying of hair in young adults

thick, dry skin swollen eyelids deep, hoarse voice thick tongue

thickened facial features slowed heart rate

decreased sexual interest

loss of hearing

numb and tingling hands.





Untreated hypothyroidism may result in:

enlargement of the heart and heart failure (rare)

psychiatric disorders

difficulty breathing

loss of consciousness

slowing of mental processes

inability to maintain normal body temperatures.

The condition that develops after several years of untreated hypothyroidism is called myxedema. A person with myxedema becomes cold and drowsy and may lapse into a coma.



How is it diagnosed?



If the doctor thinks that you may have hypothyroidism, he or she will order blood tests to measure the levels of both thyroid hormone and your pituitary's thyroid-stimulating hormone (TSH).

How is it treated?

After your doctor has diagnosed hypothyroidism, he or she will prescribe synthetic thyroid hormone tablets. You will most likely need to take them every day for the rest of your life.

Most people need only small doses to replace their gland's normal output. After starting treatment, your doctor will repeat the original blood tests to be sure you are taking enough thyroid hormone.

If you have coronary artery disease or are at risk for it, your doctor will prescribe a smaller dose of hormone tablets in the beginning. Replacing the thyroid hormone too quickly can worsen coronary artery disease and, in some cases, can prompt a heart attack. Women prone to osteoporosis may have greater bone loss if they are treated with too much thyroid hormone. They, too, will be given a smaller dose.



Usually hypothyroidism improves within a week after the hormone therapy is begun. All symptoms disappear within a few months. In most cases, however, you must continue this treatment for the rest of your life.

How long will the effects last?

Mild hypothyroidism causes no symptoms. If the disease progresses, however, it can become disabling over a long time if it is not treated.

If not treated, long-lasting thyroiditis can cause goiter, a swelling of the thyroid gland. The thyroid gland may look or feel enlarged.

How can I take care of myself?

Many people with hypothyroidism, especially older adults, don't seek medical treatment because they don't know they have a problem. They may accept their symptoms of fatigue, muscle weakness, dry skin, depression, cold intolerance, and constipation as signs of aging. If you notice some of the symptoms of hypothyroidism, see your doctor.



What can be done to help prevent hypothyroidism?

Hypothyroidism is no longer caused by not getting enough iodine in the diet in the United States.

There is no way to prevent hypothyroidism. However, treatment is simple and inexpensive.

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